



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,404	05/08/2001	Gregory C. Schohn	042933/274317	1878
826 7590 12/05/2008				
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000				
EXAMINER				
BLACKWELL, JAMES H				
ART UNIT		PAPER NUMBER		
2176				
MAIL DATE		DELIVERY MODE		
12/05/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/851,404

Applicant(s)

SCHOHN ET AL.

Examiner

James H. Blackwell

Art Unit

2176

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16, 17, 19-43 and 45-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16, 17, 19-43 and 45-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

This Office Action is in response to an amendment filed 10/01/2008.

Claims 1-14, 16-17, 19-43 and 45-57 are pending.

Claims 1, 36, 38, 41, 42, 53 and 56 are independent claims.

Claim 57 is a new claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7-9, 11-14, 16-17, 19-20, 22-25, 29-43, 45-47 and 49-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyler (U.S. Patent No. 7,047,033 B2 filed 01/31/2001, issued 05/16/2006) in view of Bickmore et al. (hereinafter Bickmore, U.S. Patent No. 6,857,102 filed 01/29/1999, issued 02/15/2005).

In regard to independent Claim 1, Wyler discloses:

➤ *A method comprising:*

- *receiving an electronic document represented by serial data that contains content of the document and defines an order in which respective portions of the content are to be presented on a display for viewing (at least Col. 1, line 54 through Col. 2, line 40; Col. 27, line 16 through Col. 28, line 50 → Wyler describes a method for processing information received by a*

wireless device over a computer network from at least one source of information (e.g., markup languages such as HTML, Rich Text Format, Scripts; see Col. 11, line 38 through Col. 12, line 29), parsing at least some of the information and employing at least some results of the parsing to provide the information in a form suitable for display to a user on the wireless device. Markup language sources of content, such as HTML markup, were known by those of ordinary skill in the art at the time of invention to typically contain markup tags which at least in part, implicitly defined an ordering of the content. When displayed, such content would visually appear in an order at least in part according to the tagging. Thus, Wyller teaches serial data received with a defined initial ordering of the content),

- *analyzing the serial data of the electronic document by at least one transformation module to determine an order of presentation of the portions of the content different from the order defined by the serial data (at least Col. 11, line 38 through Col. 12, line 29; Col. 14, line 59 through Col. 17, line 40; Col. 27, line 16 through Col. 28, line 50 → content from any web-site, in any initial format or layout is parsed, analyzed (filtered), and converted to an intermediate scripting language. The scripting language conversion creates objects for each of the identified components of the received web page and allows for easier manipulation of the contents. Once analyzed and converted to objects, each of the objects are*

given a weight according to rules governing where the content object is located both physically on the page, and logically within the page structure. Once the content objects are weighted, they can be reconstructed, for example, into a book style document, which through various means acts to reorder or otherwise change (i.e., add or remove) the content according to the style of document that the content is being mapped into (see Col. 17, line 41 through Col. 22, line 6). One goal of converting to an intermediate scripting language, creating objects, and reconstructing a document in this way is to generate output capable of being displayed and used on devices with lesser capabilities, for example, in terms of screen size (see Col. 29, line 61 through Col. 30, line 12 particularly item b. stating, "the order in which information is displayed may be changed e.g. such that important contexts precede less important contexts.").

Thus, Wyler also teaches the limitation *the different order of presentation being adapted based upon a performance capability of a display of a target device* (e.g. screen size of wireless device; see Col. 12, lines 32-37),

- *generating reorganization information for use in delivering the portions of the content, the reorganization information enabling presentation of the portions in the different order* (Col. 16, line 36 through Col. 17, line 40; Col. 17, line 44 through at least Col. 19, line 38 → content can be

reordered according to its importance established by assigned weights.

During reconstruction, a new document is created and content is placed according to its importance governed by weights assigned to each content component).

Wylar fails to disclose:

- *wherein the reorganization information includes a hyperlink to be displayed near the beginning of a first sub-document of the portions in the different order, the hyperlink pointing to a location of a particular portion of the content that is not at a beginning of the order defined by the serial data, the location being determined based on the content of the serial data and without regard to the ordering of the portions.*

However, Bickmore discloses *wherein the reorganization information includes a hyperlink to be displayed near the beginning of a first sub-document of the portions in the different order, the hyperlink pointing to a location of a particular portion of the content that is not at a beginning of the order defined by the serial data, the location being determined based on the content of the serial data and without regard to the ordering of the portions* (see at least Col. 8, lines 13-40; Figure 1 → Bickmore describes a similar re-authoring system for at least web documents that includes a plurality of "transforms." A "section header outlining" transform generates, from an original web page, a table of contents page comprising identified and extracted section headers, and a series of other pages containing the content

associated with the section headers. Each section header on the table of content page comprises a hyperlink to its associated content page. Bickmore also describes a "First Sentence Elision" transform which performs a similar function but does not rely on identified and extracted section headers but rather identifies and extracts "First Sentences" of a given text block and creates hyperlinks of those first sentences to form a table of contents. In either case, Bickmore discloses the creation of a table of contents (i.e. a *first sub-page*) containing hyperlink(s) to other content; the hyperlink based on the content of the serial data (section headers or first sentences).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyller and Bickmore as both inventions are related to the reformatting of web content for devices with limited capabilities. Adding the disclosure of Bickmore provides the benefit of a table of contents, each entry of which is linked to its related content.

In regard to dependent Claim 2, Wyller discloses:

- *the serial data representing the electronic document is expressed in a markup language* (at least Col. 11, lines 39-67 → web source page is scanned for markup languages (e.g., HTML, WML), scripting languages, rich text format, etc.); (Col. 14, line 60 through Col. 16, line 34 → discusses processing that typically would occur to document components associated with a markup language (links, images, tables, etc.)).

In regard to dependent Claim 3, Wyler discloses:

- *the mark-up language comprises a hypertext markup language* (at least Col. 11, lines 39-67 → web source page is scanned for markup languages (e.g., HTML, WML)).

In regard to dependent Claim 7, Wyler discloses:

- *the hypertext markup language comprises HTML* (at least Col. 11, lines 39-67 → web source page is scanned for markup languages (e.g., HTML, WML)).

In regard to dependent Claim 8, Wyler discloses:

- *the markup language comprises PDF, postscript, SGML, PowerPoint, rich text, or unformatted text* (at least Col. 11, lines 39-67 → web source page is scanned for markup languages (e.g., HTML, WML), scripting languages, rich text format, etc.).

In regard to dependent Claim 9, Wyler discloses:

- *the content of the document includes at least one of the following: text, images, tables, frames, and headings* (at least Col. 15, line 32 through Col. 16, line 33 → describes identification of document content components including links, text, images, and tables).

In regard to dependent Claim 11, Wylar discloses:

- *the reorganization information includes an identification of a relative importance of the respective portions of the content (at least Col. 16, line 36 through Col. 17, line 40; Col. 17, line 44 through at least Col. 19, line 38 → content can be reordered according to its importance established by assigned weights During reconstruction, a new document is created and content is placed according to its importance governed by weights assigned to each content component).*

In regard to dependent Claim 12, Wylar discloses:

- *the reorganization information includes an identification of a main block of text (at least Col. 12, lines 14-30 → the system takes advantage of how a typical web page's contents are laid out both physically on the page and logically by content by a designer (in regions) to assist in determining the various parts (e.g., main block of text) contained in the web page and to eventually convert those identified components into M20 scripting).*

In regard to dependent Claim 13, Wylar discloses:

- *the analyzing includes finding an annotation inserted in the electronic document as a marker of the location of the main block of text (at least Col. 12, lines 14-30 → the system takes advantage of how a typical web page's contents are laid out both physically on the page and logically by content by a designer (in regions) to assist in determining the various parts (e.g., main block of text) contained in the*

web page and to eventually convert those identified components into M20 scripting. Content is then plugged into a template according to the region defined for it. The defined regions act as markers or annotations indicating the various regions of content. In this way, the system can later identify the beginnings and endings of these regions and assign them to particular web page components and convert those components to M20 scripting).

In regard to dependent Claim 14, Wyler discloses:

- *the reorganization information associates a revised order for presentation with at least some of the portions of content* (at least Col. 16, line 36 through Col. 17 line 40 → describes how various components of a received web page are identified, converted to M20 script objects, and then assigned weights based on physical, logical location of the object in the page as well as its relationship to a base or main object. All of these weights are then evaluated and go into determining what the output document contains when constructed will look like and what it will and won't contain).

Thus, Wyler, in creating a revised document for a mobile device uses the weighting to determine the content and layout of the document displayed on the mobile device.

In regard to dependent Claim 16, Wyler discloses:

- *the hyperlink is included only if the location of the hyperlink in the document is separated by at least a predetermined distance from the location to which it points* (at least Col. 32, line 23 through Col. 35, at least to line 28 → describes a method for formatting a small display to contain objects that are determined to be retained (e.g., by their importance, weight). Among these is the creation of navigational components (i.e., Navigation Bar, Link Cluster). Both of these navigational components assist the user in navigating the created web page on the mobile device (see also Figures 25-28; a Link Cluster is shown in Figure 25 "Home Archives", etc. The "Home" link would represent a link added to link back to the home page or top of the page which is currently not displayed in Figure 25).

In regard to dependent Claim 17, Wyler fails to disclose:

- *the reorganization information causes an automatic redirection from the first portion of the content to a later portion of the content when the document is opened for presentation by directing a user to the later portion in response to opening of the document.*

However, it would have been obvious to one of ordinary skill in the art of web design at the time of invention to have added or inserted, for example, a HTML META command of the type to the reorganization information directing the new document created for the mobile device, providing the benefit of quickly directing the

user of the mobile device to content deemed perhaps more important or critical or timely.

In regard to dependent Claim 19, Wyller discloses:

- *the different order of presentation enabled by the reorganization information is adapted for a display that has a more restricted performance capability than does the performance capability of the display for which the document was originally designed* (at least Col. 27, lines 29-38; Figures 18A-C → describes the process of receiving content originally from a web site designed with a desktop user in mind, and processing that content to generate a revised document suitable for display (i.e., adapted for a display that has a more restricted performance capability) on a wireless telephone, which would have had a more restricted performance capability than would a desktop computer).

In regard to dependent Claim 20, Wyller discloses:

- *the more restricted display is part of a mobile phone or personal digital assistant, and the display for which the document was originally designed comprises a desktop computer monitor* (at least Col. 27, lines 29-38; Figures 18A-C → describes the process of receiving content originally from a web site designed with a desktop user in mind, and processing that content to generate a revised document suitable for display (i.e., adapted for a display that has a more

restricted performance capability) on a wireless telephone, which would have had a more restricted performance capability than would a desktop computer).

In regard to dependent Claim 22, Wyller discloses:

- *analyzing includes identifying one of the portions as containing main content of the document* (at least Col. 23, line 12-18 → among the components of the originally received web page identified is the "Body Text" or the main text object).

In regard to dependent Claim 23, Wyller discloses:

- *generating includes inserting the hyperlink to point to the beginning of the main content portion* (at least Col. 32, line 23 through Col. 35, at least to line 28 → describes a method for formatting a small display to contain objects that are determined to be retained (e.g., by their importance, weight). Among these is the creation of navigational components (i.e., Navigation Bar, Link Cluster). Both of these navigational components assist the user in navigating the created web page on the mobile device (see also Figures 25-28; a Link Cluster is shown in Figure 25 "Home," "Archives", etc. The "Home" link, for example, would represent a link added to link back to the home page or top of the page which is currently not displayed in Figure 25).

In regard to dependent Claim 24, Wyller discloses:

- *generating includes moving the main content portion to near the beginning of the document* (at least Col. 16, line 36 through Col. 17, line 40; Col. 17, line 44 through at least Col. 19, line 38 → content can be reordered according to its importance established by assigned weights During reconstruction, a new document is created and content is placed according to its importance governed by weights assigned to each content component. A "central content portion" would have typically been given a high weight by the system of Wrier and thus its final position in the document would have changed likely to the beginning of the document).

In regard to dependent Claim 25, Wyller discloses:

- *generating includes altering the document so that the main content portion appears first when the document is presented* (at least Col. 16, line 36 through Col. 17, line 40; Col. 17, line 44 through at least Col. 19, line 38 → content can be reordered according to its importance established by assigned weights During reconstruction, a new document is created and content is placed according to its importance governed by weights assigned to each content component. A "central content portion" would have typically been given a high weight by the system of Wrier and thus its final position in the document would have changed likely to the beginning of the document).

In regard to dependent Claim 29, Wyler discloses:

- *analyzing includes identifying portions of the document that should be moved relative to other portions in generating the reorganization information* (at least Col. 24, lines 15-41; Figure 12 → represents a Book format style that the content components of the originally received web page, identified and converted to objects can be organized into. For the original component objects (not filtered out) to fit within the Book format style (i.e., template), many of the original component objects are necessarily relocated/reorganized to comply with the Book format style requirements. Wyler also assures that related content remains connected (e.g., via Navigational bars, and hyperlinks which may appear in locations different from the content they're directed to).

In regard to dependent Claim 30, Wyler discloses:

- *the portions that should be moved comprise images or tables* (at least Col. 16, line 36 through Col. 17, line 40; Col. 17, line 44 through at least Col. 19, line 38 → content can be reordered/reorganized according to its importance established by assigned weights. Any images, tables, or any other sort of content that did not get filtered out as being irrelevant, could have been relocated/reordered in the construction of the new document where the specific content components are placed according to their importance governed by weights assigned to each content component such as images or tables).

In regard to dependent Claim 31, Wyller discloses:

- *analyzing includes identifying regions according to functions* (at least Col. 21, line 60 through Col. 23, line 42 → depicts numerous content types, some of which perform specific functions such as advertising, linking, etc.).

In regard to dependent Claim 32, Wyller discloses:

- *the functions include navigation and content* (at least Col. 23, lines 13-25 → depicts numerous content types, including body text and navigation (hyperlinks)).

In regard to dependent Claim 33, Wyller discloses:

- *the analyzing includes converting the document to a tree format* (Col. 31, lines 12-35, Figures 28, 34-35 → depicts an example of an object tree generated by parsing the webpage of Figure 28 (original page), except for the children of element 88 (Table), which themselves form an object tree and which are not illustrated in Figure 34. The objects in the object tree are graded in step 1660, in order to assign a weight to each object in the tree. In step 1670, a decision is made by threshold-ing the weights determined in step 1660. Typically, different thresholds are used for different types of objects. For example, text objects may have a lower threshold than image objects. Generally, object types for which there is a high degree of confidence that their weights accurately reflect their importance are assigned a relatively high threshold. Conversely, object types for which there is a low degree of confidence that their weights accurately reflect

their importance are assigned a relatively low threshold to prevent important information from being inadvertently discarded).

In regard to dependent Claim 34, Wyller discloses:

- *the analyzing includes blocking major regions of the document by dividing the major regions into respective blocks (at least Figures 2-3, and 6 → Figures 2 to 3 depict Wyller's invention dividing original content (Figure 2) into blocks).*

In regard to dependent Claim 35, Wyller discloses:

- *the analyzing includes counting characters of text (Col. 31, lines 41-55 → describes that words are counted as a part of a "word matching" function which in turn is a part of the determination and weighting of text objects. Words contain characters).*

In regard to independent Claim 36, Wyller discloses:

- *A method, comprising:*
 - *receiving a request from a remote device for a portion of a document represented by serial data that contains content of the document and defines an order in which respective portions of the content are to be presented on a display for viewing, and in response to the request (at least Col. 1, line 54 through Col. 2, line 40; Col. 27, line 16 through Col. 28, line 50 → describes a method for processing information received by a*

wireless device over a computer network from at least one source of information (e.g., markup languages such as HTML, Rich Text Format, Scripts; see Col. 11, line 38 through Col. 12, line 29), parsing at least some of the information and employing at least some results of the parsing to provide the information in a form suitable for display to a user on the wireless device. Markup language sources of content, such as HTML markup, were known by those of ordinary skill in the art at the time of invention to typically contain markup tags which at least in part, implicitly defined an ordering of the content. When displayed, such content would visually appear in an order at least in part according to the tagging. Thus, Wyller teaches serial data received with a defined initial ordering of the content),

- *analyzing the serial data of the electronic document by at least one transformation module to determine an order of presentation of the portions of the content different from the order defined by the serial data, the different order of presentation being adapted based upon a performance capability of a display of a target device* (at least Col. 11, line 38 through Col. 12, line 29; Col. 14, line 59 through Col. 17, line 40; Col. 27, line 16 through Col. 28, line 50 → content from any web-site, in any initial format or layout is parsed, analyzed (filtered), and converted to an intermediate scripting language. The scripting language conversion creates objects for each of the identified components of the received web

page and allows for easier manipulation of the contents. Once analyzed and converted to objects, each of the objects are given a weight according to rules governing where the content object is located both physically on the page, and logically within the page structure. Once the content objects are weighted, they can be reconstructed, for example, into a book style document, which through various means acts to reorder or otherwise change (i.e., add or remove) the content according to the style of document that the content is being mapped into (see Col. 17, line 41 through Col. 22, line 6). One goal of converting to an intermediate scripting language, creating objects, and reconstructing a document in this way is to generate output capable of being displayed and used on devices with lesser capabilities, for example, in terms of screen size (see Col. 29, line 61 through Col. 30, line 12 particularly item b. stating, "the order in which information is displayed may be changed e.g. such that important contexts precede less important contexts.").

Thus, Wyler also teaches the limitation *the different order of presentation being adapted based upon a performance capability of a display of a target device* (e.g. screen size of wireless device; see Col. 12, lines 32-37), and

- *returning at least one and fewer than all of the portions of the content using reorganization information that enables presentation of the portions in the different* (at least Page 7, Paragraphs [0164-0167] → as part of the

conversion of the source document into M20 (intermediate) Script Language (2nd Level), Wyler's application removes irrelevant information (images and data i.e. advertising banners, links to unrelated issues) from the source document (webpage)). Thus, Wyler can create a new document that has less than the original document content-wise, and return the document to the target device).

Wyler fails to disclose:

- *wherein the reorganization information includes a hyperlink to be displayed near the beginning of a first sub-document of the portions in the different order, the hyperlink pointing to a location of a particular portion of the content that is not at a beginning of the order defined by the serial data, the location being determined based on the content of the serial data and without regard to the ordering of the portions.*

However, Bickmore discloses *wherein the reorganization information includes a hyperlink to be displayed near the beginning of a first sub-document of the portions in the different order, the hyperlink pointing to a location of a particular portion of the content that is not at a beginning of the order defined by the serial data, the location being determined based on the content of the serial data and without regard to the ordering of the portions* (see at least Col. 8, lines 13-40; Figure 1 → Bickmore describes a similar re-authoring system for at least web documents that includes a

plurality of "transforms." A "section header outlining" transform generates, from an original web page, a table of contents page comprising identified and extracted section headers, and a series of other pages containing the content associated with the section headers. Each section header on the table of content page comprises a hyperlink to its associated content page. Bickmore also describes a "First Sentence Elision" transform which performs a similar function but does not rely on identified and extracted section headers but rather identifies and extracts "First Sentences" of a given text block and creates hyperlinks of those first sentences to form a table of contents. In either case, Bickmore discloses the creation of a table of contents (i.e. *a first sub-page*) containing hyperlink(s) to other content; the hyperlink based on the content of the serial data (section headers or first sentences).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler and Bickmore as both inventions are related to the reformatting of web content for devices with limited capabilities. Adding the disclosure of Bickmore provides the benefit of a table of contents, each entry of which is linked to its related content.

In regard to dependent Claim 37, Wyler discloses:

- *also including receiving other requests for portions of the content of the document, and in response to the requests, returning other portions of the content using the reorganization information (see Figures 18A-C → each of these figures depicts different types of mobile devices capable of requesting content. The requested content for each of these different devices would be processed and an appropriate content would be then provided to each of these devices constructed according to an output style chosen and what fits on the screen of the device).*

In regard to Claim 38, Claim 38 merely recites a data structure stored on a medium and capable of configuring a machine to respond to requests from the method of Claim 1. Thus, Wyler in view of Bickmore discloses every limitation of Claim 38, as indicated in the above rejection for Claim 1.

In regard to dependent Claim 39, Wyler discloses:

- *also including the content, the data being expressed as a modified version of an original data structure that expressed the document (at least Col. 11, line 41 through Col. 12, line 9 → Wyler generally discloses the steps of receiving an original web page, analyzing the web page to identify the various components, which would include content, converting that content to objects, determining which objects to keep and which ones to omit, and constructing a new document*

suitable for display on a mobile device such as a phone or PDA. In doing so, a new "data structure" in at least the form of a modified/reordered/reorganized mobile friendly document is generated comprising at least some of the original content).

In regard to dependent Claim 40, Wylar discloses:

- *the modified version includes annotations* (at least Col. 24, lines 53 -67 → describes an auto detection of style selected for the output document content to be mapped into and includes the annotation of, for example, Date and Time, user information, etc.).

In regard to Claim 41, Claim 41 merely recites an apparatus for carrying out the method of Claim 1. Thus, Wylar in view of Bickmore discloses every limitation of Claim 41, as indicated in the above rejection for Claim 1.

In regard to Claim 42, Claim 42 merely recites an apparatus (machine) for carrying out the method of Claim 1. Thus, Wylar in view of Bickmore discloses every limitation of Claim 42, as indicated in the above rejection for Claim 1.

In regard to Claims 43 and 45, Claims 43 and 45 merely recite a data structure stored on a medium and capable of configuring a machine to respond to requests from the method of Claims 14 and 17, respectively. Thus, Wylar in view of Bickmore

discloses every limitation of Claims 43 and 45, as indicated in the above rejections for Claims 14 and 17.

In regard to Claims 46 and 47, Claims 46 and 47 merely recite a data structure stored on a medium and capable of configuring a machine to respond to requests from the method of Claims 19, and 20, respectively. Thus, Wyer in view of Bickmore discloses every limitation of Claims 46 and 47, as indicated in the above rejections for Claims 19 and 20.

In regard to Claims 49 and 50, Claims 49 and 50 merely recite an apparatus for carrying out the method of Claims 19 and 20, respectively. Thus, Wyer in view of Bickmore discloses every limitation of Claims 49 and 50, as indicated in the above rejections for Claims 19 and 20.

In regard to Claims 51 and 52, Claims 51, and 52 merely recite an apparatus (machine) for carrying out the method of Claims 19, and 20, respectively. Thus, Wyer in view of Bickmore discloses every limitation of Claims 51, and 52, as indicated in the above rejections for Claims 19, and 20.

In regard to Claim 53, Claim 53 merely recites an apparatus (display) for carrying out the method of Claim 1. Thus, Wyer in view of Bickmore discloses every limitation of Claim 53, as indicated in the above rejection for Claim 1.

In regard to Claims 54 and 55, Claims 54, and 55 merely recite an apparatus (display) for carrying out the method of Claims 19 and 20, respectively. Thus, Wyler in view of Bickmore discloses every limitation of Claims 54 and 55, as indicated in the above rejections for Claims 19 and 20.

In regard to Claim 56, Claim 56 merely recites a computer program product for carrying out the method of Claim 1. Thus, Wyler in view of Bickmore discloses every limitation of Claim 56, as indicated in the above rejection for Claim 1.

In regard to dependent Claim 57, Wyler fails to disclose:

- *the reorganization information includes an annotation, the annotation identifying a portion of content and causing the target device to start directly at the portion of content when a user requests the electronic document.*

However, Bickmore discloses *the reorganization information includes an annotation, the annotation identifying a portion of content and causing the target device to start directly at the portion of content when a user requests the electronic document* (at least Col. 8, lines 13-40; Figure 1 → Bickmore describes various "transforms" which alter an existing web document so that it can be used effectively on, for example, a PDA or cell phone-sized device with limited display, memory, etc. One transform, creates a table of contents with each entry comprising either a section title or a first sentence. These entries are then hyperlinked to their associated content. The construction of the table of content by identifying and

extracting these entries and hyperlinking each of them to their content amounts to annotations added to the original document. When any of these annotations is selected by the user of the target device, the link directs them to that portion of the content associated with that hyperlink.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Wyler and Bickmore as both inventions relate to adapting content based on conditions. Adding the teaching of Bickmore provides the benefit of providing a table of contents with which a user can quickly navigate to a desired portion of content on a mobile device.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyler in view of Bickmore, and in further view of Raghunandan (U.S. Patent No. 6,775,689 filed 06/07/2000, issued 08/10/2004).

In regard to dependent Claim 4, Wyler and Bickmore fail to disclose:

- *the serial data representing the electronic document is expressed in an electronic mail format.*

However, Raghunandan discloses *the serial data representing the electronic document is expressed in an electronic mail format* (see at least Abstract → describes a method for restructuring email messages for transmission to a plurality of recipients by providing transmission control directives and email content segment identifiers supplied by the user, parsing the said directives and email contents, expanding aliases wherever necessary and applying the said directives to

restructure the email contents and further including reordering selected identified segments identified by a user in a defined sequence prior to transmission).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler, Bickmore and Raghunandan since all three inventions are related to the restructure and reorder of content in various document types. Adding the disclosure of Raghunandan provides the benefit of including among those various document types email documents.

In regard to dependent Claim 5, Wyler and Bickmore fail to disclose:

➤ *the electronic mail format includes a header and a main body.*

However, Raghunandan discloses *the electronic mail format includes a header and a main body* (at least Col. 10, lines 15-61 → clearly shows the structure of an email including header and main body).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler, Bickmore and Raghunandan since all three inventions are related to the restructure and reorder of content in various document types. Adding the disclosure of Raghunandan provides the benefit of including among those various document types email documents.

In regard to dependent Claim 6, Wyler and Bickmore fail to disclose:

- *the analyzing includes determining the start of the main body.*

However, Raghunandan discloses *the analyzing includes determining the start of the main body* (at least Col. 6, lines 41-44 → the email system parses the said message to identify each segment as well as the list of recipients for each segment, as shown in block (1.2)). In doing so, Raghunandan would have identified the main body of the email.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler, Bickmore and Raghunandan since all three inventions are related to the restructure and reorder of content in various types of email documents.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wyler in view of Bickmore, and in further view of Hirose et al. (hereinafter Hirose, U.S. Patent No. 6,973,619 filed 06/30/1999, issued 12/06/2005).

In regard to dependent Claim 10, both Wyler and Bickmore fail to disclose:

- *the different order in which the respective portions of the content are to be presented includes a two-dimensional layout.*

However, Hirose discloses *the different order in which the respective portions of the content are to be presented includes a two-dimensional layout* (see Figure 30 → depending on screen size 320x240 versus 240x180, Hirose can generate a 2-D layout (see underlying page associated with 320x240 resolution containing what

appears to be two columns, with one containing an image and another containing text). Generally, Hirose can adjust depending on the amount of screen space available on the client.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler, Bickmore and Hirose as all three inventions are related to the reformatting of web content for devices with limited capabilities. Adding the disclosure of Hirose provides the benefit of changing the layout of a page to suit the amount of screen space available.

Claims 21 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyler in view of Bickmore, and in further view of Ma et al. (hereinafter Ma, "A Framework for Adaptive Content Delivery in Heterogeneous Network Environments", Copyright 01/2000).

In regard to dependent Claim 21, Wyler and Bickmore fail to disclose:

➤ *presentation of the portions of the content comprises presenting the portions by speech synthesis.*

However, Ma discloses *presentation of the portions of the content comprises presenting the portions by speech synthesis* (Pg. 3, Sec. 3.2 → Ma describes a Modality Transform that includes speech-to-text and text-to-speech transform that transforms content into speech for use on a mobile device).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler, Bickmore and Ma as all three

inventions are related to modifying original content to be suitable for mobile devices. Adding the disclosure of Ma provides the benefit of converting text content to speech to assist the vision-impaired.

In regard to Claim 48, Claim 48 merely recites a data structure stored on a medium and capable of configuring a machine to respond to requests from the method of Claim 21. Thus, the combination of Wylar, Bickmore and Ma discloses every limitation of Claim 48, as indicated in the above rejection for Claim 21.

Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wylar in view of Bickmore, and in further view of Kanevsky (U.S. Patent No. 6,300,947 filed 07/06/1998, issued 10/09/2001).

In regard to dependent Claim 26, both Wylar and Bickmore fail to disclose:

- *analyzing includes identifying portions of the document that should not be separated in generating the reorganization information.*

However, Kanevsky discloses *analyzing includes identifying portions of the document that should not be separated in generating the reorganization information* (at least Col. 11, lines 64-67; Col. 12, lines 1-12 → amongst the criteria for making priority decisions in order to determine what and how to display web objects is how the web objects depend from or are associated with each other).

In addition, Kanevsky discloses (Col. 14, lines 15-28 → that web objects that contain or point to information with the same or similar topics are combined into one set.

Kanevsky further discloses (see Col. 14, lines 58-67 → a semantic interpreter module that separates objects on web pages that refer to different topics and combines (unifies) objects that refer to the same or similar subjects.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Wyler, Bickmore and Kanevsky as all three inventions relate to adapting content based on conditions. Adding the teaching of Kanevsky provides the benefit of fitting the content of a web page into a variety of display types and sizes.

In regard to dependent Claim 27, both Wyler and Bickmore fail to disclose:

➤ *the portions that should not be separated include at least one of the following pairs: heading and text, image and caption, or paragraph and related paragraph.*

However, Kanevsky discloses the portions that should not be separated include at least one of the following pairs: heading and text, image and caption, or that paragraph and related paragraph (at least Col. 14, lines 15-57 → depicts numerous headings associated with links that direct the reader to the associated content (text)).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Wyler, Bickmore and Kanevsky as all three

inventions relate to adapting content based on conditions. Adding the teaching of Kanevsky provides the benefit of fitting the content of a web page into a variety of display types and sizes.

In regard to dependent Claim 28, both Wyler and Bickmore fail to disclose:

- *analyzing includes identifying portions of the document that should not be moved relative to other portions of the document.*

However, Kanevsky discloses *analyzing includes identifying portions of the document that should not be moved relative to other portions of the document* (at least Col. 15, lines 30-37 → describes a semantic interpreter module that may define what can be deleted or moved).

Hence, it would have also determined what could not be deleted or moved). In addition, Kanevsky discloses (see Col. 14, lines 15-28 → that web objects that contain or point to information with the same or similar topics are combined into one set.

Kanevsky further discloses (see Col. 14, lines 58-67 → a semantic interpreter module that separates objects on web pages that refer to different topics and combines (unifies) objects that refer to the same or similar subjects.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Wyler, Bickmore and Kanevsky as all three inventions relate to adapting content based on conditions. Adding the teaching of

Kanevsky provides the benefit of fitting the content of a web page into a variety of display types and sizes.

Response to Arguments

Applicant's arguments with respect to claims 1-14, 16-17, 19-43 and 45-56 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Blackwell whose telephone number is (571)272-4089. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James H. Blackwell
11/30/2008

/Doug Hutton/
Doug Hutton
Supervisory Primary Examiner
Technology Center 2100